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Endocrine Gynecology*

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IT WAS thought practical to list the satisfactory endocrines used in our therapy, rather than enter into a description of the various endocrines, in order that the practicing physician may avoid the unnecessary time and expense of administering unsatisfactory preparations to their patients.

It is fully realized that when even the endocrinologist finds it impossible to keep up with the ever increasing knowledge of the endocrines, it is more illogical to expect the gynecologist to do so.

Estrogen

Estrogen is the femal sex hormone secreted by the ovaries. A few of the commercial names are Theelin, Estrone, Theelestrol. These are weaker than the other natural estrogens which are recommended, such as Progynon-B or any estradiol.

Progynon-B in dosage of 1,000 rat units is equivalent to 10,000 to 15,000 international units of Theelin. Progynon-B is therefore more economical and has the added advantage of being quicker acting. Progynon-B is the natural hormone, similar to that secreted by the ovarian follicle, while Theelin is like the waste products excreted after the natural estrogenic hormone have been metabolized in the body.

Action of the Estrogens:

1. Causes growth of tubes, uterus, endometrium, cervix, vaginal mucosa, mammary duct system and secondary characteristics.
2. Inactivates the pituitary hormone as it emerges from the pituitary gland.

*Selected by the author from his textbook, "Office Gynecology, Diagnosis and Treatment in Outline Form."

3. Stimulates an increase in the Mitochondria and Golgi apparatus of the pituitary gland with resultant increase in secretion.

4. Produces a temporary atrophy of the ovaries. This is the rationale for its use in the treatment of many cases of cystic ovaries.

5. Estrogens have a distinct sedative action.

6. Other less important physiological actions.

Clinical indications for the use of Estrogens:

1. The vaso-motor symptoms of menopause and castration.

2. Senile vaginitis and the vulvo-vaginitis of infants and children.

3. Amenorrhea, secondary and primary.

4. For the inhibition of lactation.

5. The treatment of 98% of uterine bleeding from almost all causes (By far the most important).

6. The treatment of threatened and habitual abortion and premature labor (Almost as important).

7. Some cases of placenta praevia and premature separation of the placenta.

Commercially available Estrogen:

1. Natural Hormones:

- (A) Oral: Emmenin tablets and liquids, Progynon-DH, Premarin.

- (B) Ampules: Progynon-B-Schering (preferred by author).

2. Synthetic Estrogens:

- (A) Diethylstilbestrol. (Stilbestrol).

Diethylstilbestrol

This is a synthetic chemical compound which in chemical structure is entirely different from the natural estrogen but has similar physiological characteristics

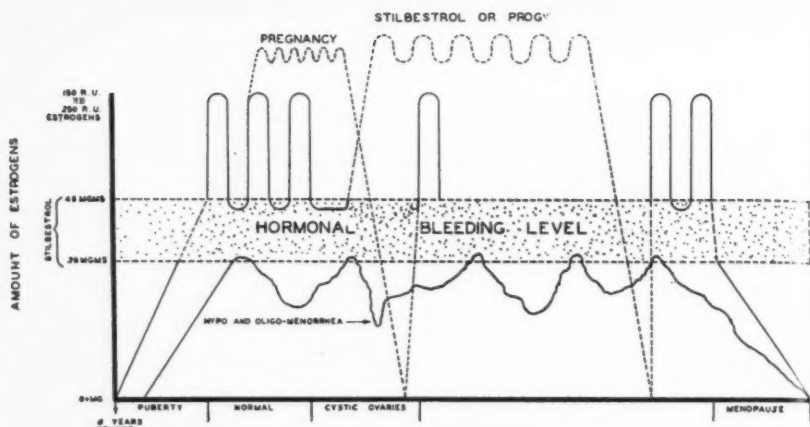


Fig. 1. Author's hypothesis of the cause of menstruation. The irregular bleeding of oligomenorrhea is shown, as well as the amenorrhea of pregnancy and during estrogenic therapy with stilbestrol or Progyon B. It is seen that bleeding takes place only at the bleeding level, and that no bleeding occurs if the patient's level of estrogen is more or less that of the bleeding level.

in every other way with one exception—it does not increase acetylcholine in the uterus.

Diethylstilbestrol is very economical and can be taken by mouth or given intramuscularly. In due time, I believe it will almost replace the use of natural estrogen entirely. The toxicity of diethylstilbestrol and the natural estrogens are the same when given in equivalent doses.

This chemical compound is the first drug used by the author that was found to cause complete, but only temporary, atrophy of the ovaries. He was the first to report in the American medical literature his clinical research findings on diethylstilbestrol when he found that this compound apparently stimulated the corpus luteum of pregnancy to produce more corpus luteum hormone.

The author has treated 3,457 gynecological cases with diethylstilbestrol. The research laboratory has done 11,253 blood counts. Urinalysis, basal metabolic rate determinations, X-ray studies of the sella turcica, gastric analysis and electrocardiograms have been done periodically on a large number of these patients.

From all this accumulated data no evidence of toxicity has been shown except nausea and vomiting, which occurred during the first few days in which the compound was administered. It was found that in 94% of the cases given diethylstilbestrol that the nausea and vomiting ceased after four or five days.

It was also found that the compound

would not cause nausea and vomiting in pregnant women, and so this phenomena has come to be regarded as a test for pregnancy.

Based upon animal experimentation Teague of New Orleans has shown that it requires not less than 7,000 milligrams of diethylstilbestrol per day to cause harm to the human being.

Commercial preparation of diethylstilbestrol:

1. Oral: 0.1; 0.25; 1.0; 5.0 mgm. tablet.
2. Ampules: 0.1; 0.25; 1.0; 5.0 mgm. per cubic centimetre for intra-muscular injection, and injection into the anterior wall of the cervix. (Author)
3. Suppositories: 0.1; 0.25; 1.0 mgms. each.

Enteric coated tablets are not advocated, and are found to be of no advantage except in cases of children suffering from vulvovaginitis in which cases the red coating has a psychologic appeal to the child. As a matter of fact, it was found that in cases of uterine bleeding and threatened abortion, the slow absorption of the enteric coated tablets worked to a disadvantage.

Suggested uses and dosage of diethylstilbestrol:

Senile Vaginitis:

0.1 mgm. every night at 9:00 o'clock until well. Repeat with each re-occurrence. Excellent results.

Amenorrhea-primary:

1.0 mgm. every night at 9:00 o'clock until flowing begins. Skip 14 days and

repeat over and over. An alternate method is to give 5.0 mgs. every night for 60 to 90 nights. Give Armour's Thyroid to tolerance doses.

Amenorrhea-secondary:

5.0 mgs. every night at 9:00 o'clock for 60 to 90 nights. Skip 30 days and repeat. Give thyroid to tolerance doses.

Hypo-menorrhea:

0.2 to 0.5 to 1.0 mgm. per day for 30 to 60 days.

Hypo-plasia of Uterus:

5.0 mgms. every night at 9:00 o'clock for 4 months or more. Thyroid to tolerance dose. Results are poor and the use of the Uterector is better.

Pains of Endometriosis:

5.0 mgs. every night at 9:00 o'clock for 5 to 6 months. If bleeding starts during the interval when the tablets are taken, give 5.0 mgs. every 15 minutes until bleeding stops but continue taking 5.0 mgs. every night for the 5 to 6 month interval.

Dysmenorrhea:

0.5 to 5.0 mgs. daily beginning 10th day of cycle, give for 7 to 14 days. The results are not satisfactory for permanent relief.

Vulvo-vaginitis:

1.0 mgs. every day for 20 days. Repeat with re-occurrence.

Menopause:

0.1 to 0.25 to 0.5 mgs., three times daily for the first day, then 0.5 mgs. as functional symptoms arise (once or twice weekly). More effective is Hexital $\frac{1}{4}$ to 3.0 mgs. and $\frac{1}{6}$ grains of phenobarbital. Give the latter in tablet form three times daily and 3 to 5 at bedtime.

Menstrual Migraine:

0.2 mgs. daily, beginning 10th day of cycle or 0.5 mgs. intramuscularly if patient comes for treatment during menstruation, or 5.0 mgs. may be given every night for 30 to 60 nights. Results are sometimes satisfactory.

III Feeling of Menses:

0.2 to 5.0 mgs. daily beginning on the 10th day of the menstrual cycle. Give up to the time of menstruation, or if the case is severe give 5.0 mgs. for 30 to 60 nights.

Functional Uterine Bleeding:

10.0 mgs. to 25.0 mgs. in oil injected into the anterior wall of cervix, using a spinal needle and a 10 cc. syringe, and 5.0 mgm. at 9:00 p.m. for 30 nights. (See CLINICAL MEDICINE, Vol. 50, No. 7, July 1943, pps. 182, 184.)

Menorrhagia: Metrorrhagia: (Hemorrhage)

Follow outline for functional uterine bleeding, then give a 5.0 mg. tablet every night for 20 to 30 nights plus the tolerance dose of thyroid. If bleeding is not severe or has not lasted for a long time, just give 5.0 mgs. every night for 30 nights.

Postpartum: (Hemorrhage)

Follow outline for functional uterine bleeding. In cases of severe bleeding, and if injection is not desirable, give 15.0 to 25.0 mgs. orally every 15 minutes until bleeding stops and then 5.0 mgs. every night at 9:00 o'clock for 30 nights.

Painful Engorgement of Breast:

10.0 mgs. every night at 9:00 o'clock for 3 to 5 nights.

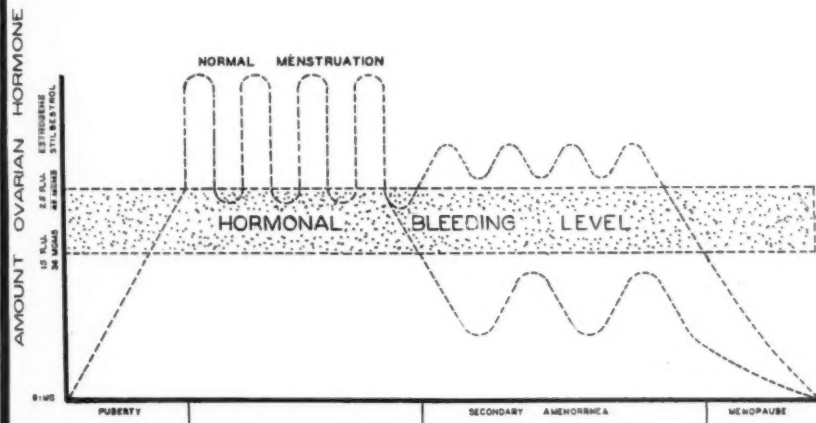


Fig. 2. Normal menstruation followed by secondary amenorrhea.

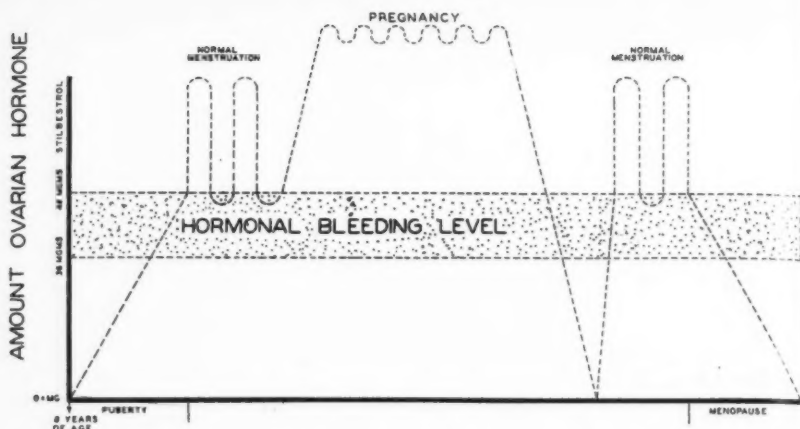


Fig. 3. The course of pregnancy as viewed with the hypothesis. The pregnant woman does not bleed because the estrogenic blood level is above the estrogenic bleeding level.

Induction of Labor

Not advocated. No results have been noted.

Missed Abortion:

10.0 mgs. to 25.0 mgs. four times a day.

Uterine Inertia with Bleeding:

25.0 mgs. intramuscularly and 25.0 mgs. into the anterior wall of the cervix and 25.0 mgs. every 15 minutes until bleeding stops, then give 10.0 to 25.0 mgs. every night, intramuscularly if desired, for 10 nights.

Endometritis:

10.0 mgs. 4 times daily for 5 to 20 days, to cause the endometrium to proliferate over the raw endometrial areas.

Threatened Abortion:

Twenty 5.0 mgs. (100.0 mgs.) tablets at start, and five 5.0 mgs. (25.0 mgs.) every 15 minutes until pain or bleeding, or both, have stopped. Then 10.0 mgs. every hour for six doses, then 10.0 mgs. every night until end of term. Repeat if necessary. Too much can not be given but too little can.

Toxemia of Pregnancy:

25.0 mgs. four to eight times daily.

Bleeding from Incomplete Abortion:

Given twenty 5.0 mgs. (100.0 mg.) tablets at start and the five 5.0 mg. (25.0 mgs.) tablets every 15 minutes until bleeding stops then five, 5.0 mgs. tablets four times daily. Give two ergotrate tablets with first dose of stilbestrol and one tablet every three hours for 12 doses. This eliminates the

necessity for dilatation and curettage in most cases.

Habitual Abortion:

10.0 mgs. every night by mouth. If pains or bleeding or both start, treat as threatened abortion (above).

Non-Patent Tubes:

5.0 mgs. every night for 30 to 60 nights or inject through a uterine cannula, 1 to 100 cc. of stilbestrol (0.1 mg. per cc) under pressure, twice a week until tubes are open.

Test for Pregnancy:

10.0 to 25.0 mg. according to size of patient by mouth or intramuscularly. If there is no nausea in 4 to 6 hours, then expect pregnancy.

Pseudo-Pregnancy:

1.0 mg. every night until patient bleeds.

Nausea of Pregnancy:

5.0 mgs. every night and every night increase 5.0 mgs. until the nausea stops, then hold the dose there for 5 to 10 days.

Persistent Serosanguineous Secretion Following Delivery:

5.0 mgs. every night for 20 nights.

Operations During Pregnancy to Prevent Abortion:

50.0 mgs. intramuscularly before or at operation and 25.0 mgs. as soon as operation is finished, then 25.0 mgs. four times daily (by mouth if desired).

Acute Salpingitis to Prevent Tubo-ovarian Abscess:

5.0 mgs. daily for 40 days.

Cystic Ovaries:

5.0 mgs. every night for 20 to 60 nights.
Ovaries undergo temporary atrophy.

Sterility (No Known Cause):

5.0 mgs. every night for 20 to 30 nights.
(to give ovaries a rest). Give $\frac{1}{2}$ of
0.1 mg. tablet every night for 20 to 30
nights or until the patient becomes
pregnant.

Bleeding from Adenocarcinoma of Cervix and Endometrium:

5.0 to 25.0 mgs. every hour until bleeding
stops. Then give X-ray and radium
therapy. Our research has shown that
diethylstilbestrol does not stimulate
growth of malignant cells of the cervix
and uterus.

Indications and Dosage of Thyroid Substance:

Give $\frac{1}{4}$ grain of thyroid every morning
and every 4th morning increase the
dosage $\frac{1}{4}$ grain until the pulse is 100,
regardless of the dose ($\frac{1}{4}$ grains or 20
grains). We have given thyroid to 2,257
endocrine gynecological cases in this
manner. It has been said that large
doses of thyroid will produce uterine
bleeding. We have found just the op-
posite in our research. In cases of nor-
mal menstruation following the ingestion
of large doses of thyroid extract, the

flow became progressively less; the men-
strual period remained regular and a
state of hypomenorrhea was produced.
Thyroid was given only in the morning
as its stimulating effect was found to
produce insomnia.

Endocrine Gynecological Disease in Relation to Normal Menstruation

The number of ova in the ovary of
the newborn varies from 50,000 to 400,000.
Each adult ovary in the human female
contains about 250,000 immature ova. At
puberty there are from 30,000 to
400,000. Not more than 400 are destined
to ripen normally and be extruded. Under
stimulation of the gonadotropic hor-
mone of the anterior pituitary, one of
these ova is started on its way to matura-
rity during each menstrual cycle. Occa-
sionally, other ova are started during
the same cycle, but become refractory
to pituitary stimulation, or more impor-
tant, are inhibited by increased estrogen
in the blood, produced by the develop-
ing follicles, and finally undergo atre-
sia, leaving only one to mature during
the normal cycle.

This maturation of the Graffian fol-
licle requires from 11 to 18 days in the
average woman. During this process, the
granulosa cells in the follicle wall are
continuously producing increased
amounts of estrogen which induce the

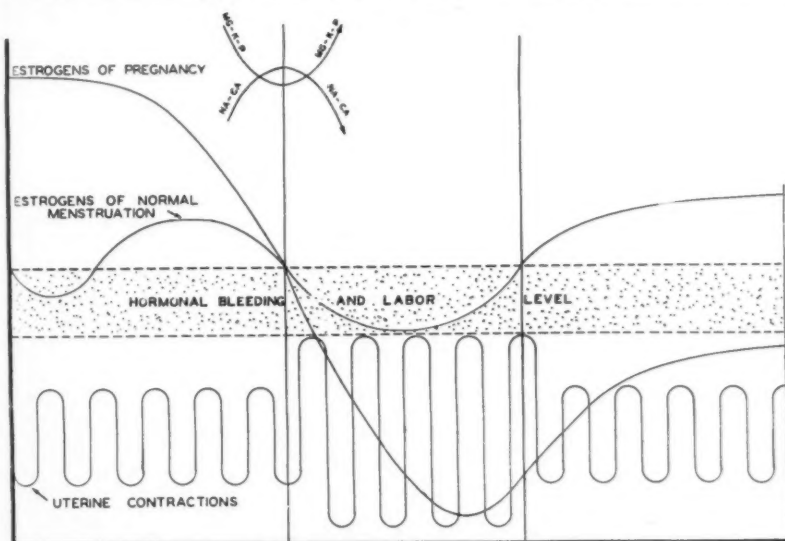


Fig. 4. The cause of labor is apparently due to the withdrawal of estrogen. Labor apparently occurs at the "blood estrogenic labor level," which is the same level for menstruation and uterine bleeding.

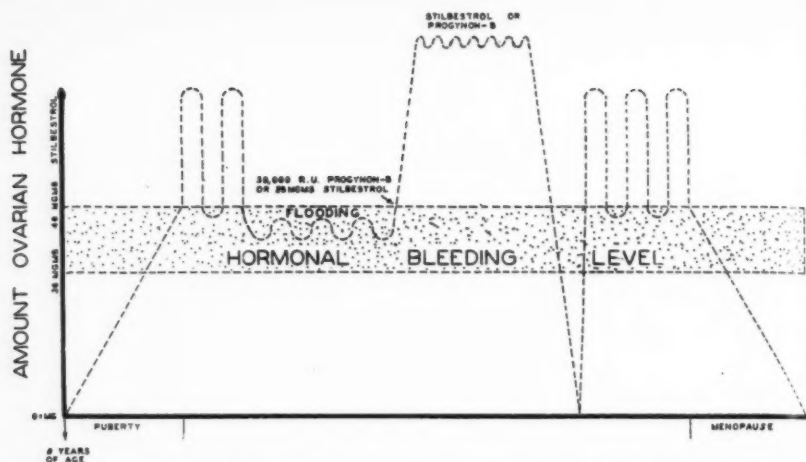


Fig. 5. The treatment of bleeding with stilbestrol or Progynon-B with resultant raising of estrogenic level above the bleeding level.

proliferative changes in the endometrium, and stimulating to new growth the basal layer of endometrium remaining from the last menstruation. There comes a time at the mid-menstrual period when there is the greatest amount of gonadotrophic stimulation and at this time the ovum is extruded. Immediately a corpus hemorrhagicum is formed at the base of the ruptured follicle. At this point the luteinizing factor of the pituitary gonadotrophic hormone begins to function or the estrogen stimulates the granulosa cells, and the follicle bed is transformed into the corpus luteum.

This corpus luteum secretes both estrogen and progesterone. The progesterone acts upon the already prepared endometrium, producing the secretion in the endometrial glands, and is the most important of all from the standpoint of menstruation. It is the progesterone that produces the "saw tooth" appearance of the endometrium.

The most important function of the progesterone is the deposition of glycogen in the secretory endometrium. Progesterone is, therefore, a glycogenic hormone.

A few hours before the onset of menstruation, there is a halt in corpus luteum activity. Estrogen and progesterone blood levels drop off sharply about this time and there is a marked spasm of the endometrium in the spiral arteries. This spasm produces an ischemia in

the upper two layers of the endometrium, resulting in sloughing and bleeding due to loss of blood supply, and a gangrene-like process is produced. The estrogen produced in the new growing follicles produces a proliferation of the endometrium.

This proliferation proceeds very quickly, and rapidly covers the raw areas in the endometrium. The follicles begin to grow as soon as menstruation begins. If the follicles fail to grow at this time, amenorrhea results.

The author's theory on menstruation and uterine bleeding, which was published two years ago, tends to show that a woman menstruates or bleeds when a certain estrogenic blood level is reached regardless of whether the estrogenic level is going up or down. This level is called by the author "The Estrogenic Bleeding or Menstruating Level." Any estrogenic concentration above the bleeding level, such as that caused by pregnancy, the interim between normal menstruation will produce a state of amenorrhea. Below the bleeding level, such as that caused by puberty past menopause, castration and in some cases of oligomenorrhea there is also a state of amenorrhea. If the estrogenic level is at the bleeding level the patient, of course, bleeds.

The most important structure in the endometrium are the "Spiral Arteries" which are the motivating factor of nor-

mal or abnormal uterine bleeding. The physiological changes in the Spiral Arteries are the same whether a woman menstruates or bleeds. Uterine bleeding may occur from any type of endometrium: atrophic, resting proliferative, hyperplastic with or without dilated glands and secretory (rarest).

The theory that a woman bleeds because of hyperestrogen in the blood, which can be found in most any standard textbook of gynecology and obstetrics, is apparently not true, because if estrogen (diethylstilbestrol) is given to a bleeding patient, the bleeding will stop. How quickly she stops depends upon the size of the dose and how often taken.

We now are in a position to graphically portray menstruation, amenorrhea and irregular uterine bleeding. (See Diagrams nos. 1 to 5.) If a woman is menstruating, or bleeding, the estrogens are at the estrogenic bleeding level. In amenorrhea, she is either above or below the bleeding level, usually above.

The ovary was found to be the controlling factor in the production of normal or abnormal uterine bleeding in 98% of our patients. Therefore, **uterine bleeding should be diagnosed as dysfunctional uterine bleeding until proven otherwise.** It must be kept in mind that the most common cause of uterine bleeding is incomplete abortion. Mechanical bleeding such as intra-uterine myomas is

not a common cause of uterine bleeding and diethylstilbestrol will not stop such mechanical bleeding.

We have a dictum: "Normal ovaries, normal menstruation; abnormal ovaries, abnormal menstruation." This is 98% correct, regardless of the size, position, shape or contents of the uterus.

Some References of the Author in Regards to Menstruation and Uterine Bleeding

1. Karnaky, K. J., Southern Medical Journal 32: 813, 1939.
2. Southern Medical Journal 32: 1250, 1939.
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10. Medical Times, 69: 199, 1941.
11. Southern Medical Journal 35: 838, 1942.

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LIBERTY AND SELF-FULFILLMENT

Whether one works for himself or for another or for a group to which he belongs does not determine his freedom. This depends on his liberty to choose or to change his occupation and association. It depends also on whether or not his work has meaning for him, by itself or as a part in a greater whole, whether or not it brings him respect as a person, and provides a sense of self-fulfillment.—KALENDS OF THE WAVERLY PRESS.

COMING ARTICLES

Acute Meningococcemia with Response to Sodium Sulfadiazine and Adrenal Cortex Extract Therapy

by CHARLES S. GREENE, M.D., Perth Amboy, New Jersey

Management of Burns and Their Complications

by JOSEPH C. URKOV, M.D., Chicago, Illinois

Diagnostic Errors Part III (Graduate Course) Critical Diagnosis

by S. Watson Smith, M.D., Bournemouth, England

Selection and the Use of the Sulfonamides

by W. A. MERRITT, M.D., Rochester, Minn.

Rocky Mountain Spotted Fever

by GEORGE E. BAKER, M.D., Casper, Wyoming

Focal Infection and Phlebitis

by OTTO MEYER, M.D., New York, N. Y.

Nutrition (A Series of Articles)

by NATHAN SMITH DAVIS, III, M.D., Chicago, Illinois

Psychosomatic Aspects of General Practice¹

By EDWARD WEISS, M.D.,† Philadelphia, Pa.

One of the most usable books published this or any other season is Weiss and English's "Psychosomatic Medicine." Dr. Weiss has summarized the introductory material here.

IT IS generally acknowledged that about one-third of the patients who consult the average physician have no definite bodily disease to account for their illness. In a recent study of 200 consecutive patients classified as follows: (1) Those in whom the illness seemed to depend entirely on emotional problems; (2) those in whom the illness seemed in part dependent on emotional problems; and (3) those in whom an emotional problem did not seem to enter into the cause of the illness, 35 per cent were placed in the first group, 35 in the second group, and 30 in the last.

How should the physician deal with these patients—how should they be studied and how treated? It is the purpose of this article to discuss these questions briefly.

"The Damn Neurotics"

Quite commonly such patients are told that there is no evidence of organic disease, that the trouble is "functional," and they are dismissed without further attention only to land eventually in the care of some irregular practitioner or quack healer.

Worse than that, the physician sometimes takes the attitude that the illness is imaginary, or that the patient is malingering; or he may assume that in some vague way the patient is deliberately responsible for the illness, refers to him as a "damn neurotic," and given him the kind of care that must necessarily go with such a characterization.

The patient may also be told that the physician does not think anything is the matter, but suspicion is cast upon some organ or system which needs watching and care. This happens very frequently with regard to the symptom of fatigue and the suspicion of pulmonary tuberculosis and often results in a state of chronic invalidism. Lastly, following "thorough study" by means of medical

history, physical examination, and laboratory investigation, some pathologic curiosity** may be discovered which really has nothing to do with the illness. The patient is then treated as though organically diseased and is submitted to unnecessary medical or surgical treatment which, in many instances, intensifies the neurotic condition.

Emotional Problems

What is the matter with these patients and how should they be treated? They are suffering from disturbances in their emotional lives; that is, the illness is of psychologic origin and can be satisfactorily studied and treated only from the psychologic standpoint. In civil life the ill health arises in a predisposed individual because of long standing dissatisfactions in the business, social, or home life. The stresses of war impose further burdens upon such predisposed persons. This failure of adjustment to environment is manifested by a disturbance in some part of the personality, either as bodily symptoms of various kinds, capable of mimicking almost any disease, or as affections of the spirit resulting in attacks of anxiety, obsessions, phobias, depression, and other disturbances of mood.

Why is it that so many physicians are unwilling to admit the psychologic basis for such illnesses, or if they do grudgingly concede that "a nervous factor is present," they believe it to be of secondary importance and probably the result of physical disease? In discussing a case of this kind they are apt to say "but there must be something the matter," meaning that there must be a physical basis for the illness and that if they are just thorough enough in their investigation, "something" will be found. However, long-time follow-up studies of such patients fail to indicate that organic disease develops in any significant number; even when it does, we must not forget that a neurotic patient may develop an organic disease that is unrelated to his neurosis just as he similarly runs a chance of getting hit by a motor car.

¹Abstract from "Psychosomatic Medicine," Weiss, E., and English, O. S., W. B. Saunders Co., Philadelphia, 1943.

†Department of Medicine, Temple University Medical School.

**By "pathologic curiosity" is meant some congenital or acquired lesion that has no significance from the standpoint of health. Slight deviations of the nasal septum and calcified primary tuberculous lesions in the lungs are examples.

Every physician freely acknowledges the relation of psychic causes to such physiologic phenomena as blushing, weeping, goose flesh, and even on occasions to vomiting, diarrhea, etc.; but many, nevertheless, find it difficult to believe that more prolonged (chronic) disturbances of a physiologic nature can possibly be psychogenic in origin.

This is due to the structural and physiologic training of modern medicine and came about in the following fashion:

The Organic Tradition in Medicine

The physician of ancient times was concerned with the spiritual basis of illness, but the structural concept introduced by Virchow led to the separation of illness from the psyche of man and a consideration of disease as only a disorder of organs and cells. With this separation of disease into many different ailments came the development of specialists to attend to all of these distinct diseases. With the specialists came the introduction of instruments of precision, and the mechanization of medicine began. Medicine now contented itself with the study of the organism as a physiologic mechanism, impressed by blood chemistry, electrocardiography, and so on but unimpressed and, indeed, often holding in contempt the investigation of the life situation of the individual, which was not considered as scientific as the results of laboratory studies. This period may in truth be referred to as the machine age in medicine. It is not to be denied that remarkable developments have occurred during this period of laboratory ascendancy, but it also must be admitted that the emotional side of illness has been almost entirely neglected.

As a consequence of this structural and physiologic tradition in medicine and lack of training in psychosomatic medicine, a great many physicians pride themselves upon their unwillingness to concede the absence of physical disease when dealing with an obscure illness. This failure to recognize neurosis and treatment of the patient as organically diseased happens most frequently, as already suggested, because modern clinical medicine attempts to establish the diagnosis of a functional disorder by ruling out organic disease through medical history, physical examination, and laboratory investigation.

The point that I particularly wish to make is that the diagnosis of functional illness must be established not simply by exclusion of organic disease but on its own characteristics as well. Neurosis

should be a positive as well as a negative diagnosis. In other words, *neurosis has its own distinctive features* to be discovered by a study of the emotional life. Only in this way can serious errors in diagnosis and treatment be avoided. If this statement is admitted, it must naturally follow that personality study is just as important in the problem of chronic illness as laboratory investigation.

Psychosomatic Study in Chronic Illness

Now the question is—how do we proceed with this kind of a study? For general purposes, it may be stated that in addition to the physical study it consists in simply getting to know the patient as a human being rather than only as a medical case. Too often, as already stated, the patient is looked upon only as a physiologic mechanism and studied by means of medical history and physical examinations aided by "instruments of precision" and chemical tests. Tape measures and test tubes carry the erroneous notion of exactness and thoroughness—erroneous because the emotional life of the individual, which may hold the key to the solution of the problem, is not investigated or at best inadequately so.

In regard to the latter point, too many physicians feel that they have done their duty to the study of the emotional life if they ask the patient if he is worried about anything and receive a negative reply. They are the same physicians who are apt to remark about a patient "but he doesn't look neurotic," perhaps believing that such a patient should by his general apprehension or by evidences of physical nervousness show the fact that he is neurotic. Unfortunately, *most neurotics do not betray any neurosis in their appearance*, nor is the approach to their emotional problem so simple that the direct question—"Are you worried about anything?"—will produce information of importance.

Probably the best way to deal with these patients is first to satisfy ourselves and establish their confidence by a thorough medical history, physical examination, and such laboratory tests as are necessary to exclude organic disease. Having assured that patient that no physical disease is present, it is usually easy, by means of examples of psychic causes for such physiologic disturbances as blushing, goose flesh, palpitation, diarrhea, and so on, to make the patient understand that a disturbance in his emotional life may be responsible for the symptoms. Then im-

portant clues to this disturbance can usually be found by encouraging a discussion of problems centering around vocational, religious, marital, and parent-child relationships. This is usually best accomplished indirectly rather than by direct questions. In the case of adults, domestic problems and professional and business relationships play a large part in functional illness. In young unmarried people, family relationships, the choice of a career, and often religious and sexual problems are important for discussion. War problems, of course, concern both.

Sexual Factors

This is too large a subject to cover in a short paper, but one point of special importance does deserve consideration and that is the relation of sexuality to neurosis. Ever since the introduction of the epoch-making studies of Freud to the problems of neurosis, medicine has misunderstood his conception of sexuality. He has often been quoted to the effect that disturbances in genital activity are the sole cause of the neuroses. This is quite far from the truth. It is rather that difficulty in the sexual sphere appears as a revealing index to a neurotic personality and can be looked upon in that light. In other words, in much the same manner that urea retention serves as an index to an impending uremia so do disturbances in the sexual life of the individual, such as varying degrees of frigidity in the female and varying degrees of impotence in the male, serve as a reliable index to the kind of personality that is very liable to develop a neurosis.

Treatment

Many physicians will ask: "Well, sup-

pose you do find something of importance in the emotional life of the patient, some conflict that is causing illness, what can you do about it? What good does it do the patient to know?" First of all, it is often a great help to the patient to know that the ailment is not organic in origin but is due to a disturbance in his emotional life. It gives him a great deal of reassurance and is the first step in the right direction. When a symptom is divorced from the fear of organic disease, cancer, for example, it becomes easier for the patient to tolerate the symptom and, surprisingly enough, it may and often does, disappear. Secondly, such knowledge and such an approach will frequently save the patient unnecessary, troublesome, and expensive medical or surgical treatment with a resulting further degree of invalidism. Often just the talking out of the problem with the physician will alleviate symptoms, and frequently some simple adjustment will accomplish real help. This caution must be sounded however—it is a good rule for the physician to listen rather than talk; giving advice on important emotional matters is dangerous.

For just as there is major and minor surgery, so there exist major and minor forms of psychotherapy, and while the average physician should not attempt major forms of psychotherapy, he must be able to recognize the severe neuroses so that he may refer them elsewhere for treatment. He should be able to deal with the simpler neuroses, not only for the purpose of helping such patients in a positive way but also to save them from unnecessary medical and surgical treatment and exploitation by quacks and irregular practitioners.

Classification of Acute Pulmonary Infections (Pneumonia or Pneumonitis)

Etiological	Clinical	Additional Classes
1. Pneumococcus	1. Lobar	1. Lipoidal—with and without secondary infection.
2. Streptococcus	2. Lobular	2. Aspiration— Sterile } Septic }
3. Staphylococcus	3. Bronchopneumonia	3. Traumatic
4. Influenzal	4. Miliary bronchopneumonia	4. Postoperative
5. Virus	5. Hilus (Central)	5. Allergic
6. Mixed	6. Interstitial	
7. Rickettsia		
8. Secondary infections		

TRAVIS SMITH, M.D., in *Texas S. J. M.*, April, 1943

The Tired, Weak, Exhausted, Depressed Patient

By JOHN A. TURNBULL, M.D., Boston, Massachusetts

PAIENTS who are tired, weak, exhausted and depressed are suffering from "toxic allergy." These symptoms are not imaginary or neurasthenic or neurotic, and should not be passed over lightly by the physician. They are ill with a definite, clinical entity. They suffer, and need care and treatment to correct the underlying causes of their troubles. Just as much attention should be paid to their symptoms as if they were victims of pneumonia or appendicitis.

Symptoms

Their symptoms are many and may be referred to all parts of the body.

Headache is a common complaint:

- (1) "Confused head"
- (2) "Miserable feeling in my head"
- (3) Dull pressure; "feels as if it would burst"

Confusion: (1) Unable to concentrate on anything they undertake

- (2) Disturbed by people; crowds
- (3) A confusion of ideas and a confused mind, followed by a consciousness of greater weakness and depression
- (4) Irritability; misunderstand the good intentions of family and friends

Their eyes feel heavy, with pressure at the back of the eyes; as if they were being pushed out. Taste is affected, and complaint is made of "a brown taste" or a "horrible taste like sewage." White, sticky, cotton-like mucus collects in the mouth. The tongue has a thick, yellow or brown coating. They complain of a sore and dry throat, with dry, hacking cough, frequently raising a thick, sticky mucus or a gelatinous mucus on arising, and occasionally a thick mucus during the day.

Digestive complaints are common. Distress may be felt over the whole abdomen, especially marked in the epigastrium. They have an "all gone feeling" and aching, with fullness and distention, quite marked in the upper half of the abdomen and the greatest in the right hypochondrium.

Sleep: Although they spend much time in bed, they sleep poorly, are disturbed

by dreams and confused ideas. In the morning, they feel "all in" and exhausted.

Disposition: They undergo great changes in disposition. The change may develop so gradually that relatives and friends fail to notice their inability to carry on their duties until the breakdown point arrives. These symptoms are of months' or years' duration.

One can frequently trace hereditary influences, which may manifest themselves in the same form or one closely related.

Age at Onset

These influences may manifest themselves at an early age, or be delayed until later in life. We come into the world with unequal powers of resistance to intellectual, emotional, physical and chemical stress.

Stress is the sum of all forces which act on the individual organism and its constituent cells. This includes diseases, wear and tear of life, mechanical work, everything affecting the emotions, and intellectual effort. While the majority of people are able to resist ordinary stresses and strains, many succumb.

Severe mental and physical illness can be caused by the stress of life, especially if excessive, on an allergic individual.

Treatment

These patients are tested cutaneously for all foods and the proper diet arranged, by avoiding the foods to which the patient is sensitive. Complete relief of symptoms follows.

After relief of all symptoms, the eating of allergic foods can bring on the previous condition. The return of symptoms by eating of foods to which the patient is sensitive proves the correctness of the cutaneous tests and diet. Allergy and the cutaneous test are an important branch of medicine.

Details

I use the cutaneous test, employing a sharp scalpel in order to cause the least trauma possible. 240 tests are given to each patient, by a person experienced in this work.

In my opinion, everyone is allergic to some foods, although they do not know it, but testing will find out the allergic foods, and on a diet these cases will receive benefit.

Every patient is thoroughly examined:

* (The Editor was so impressed by an article of this title appearing in the May 1943 issue of the *American Journal of Digestive Diseases* that he wrote the author for a brief summary as well as more specific information. He kindly submitted this abstract and the following details.)

complete blood count with red and white cell count and differential, metabolism test, fasting blood sugar, sugar tolerance blood tests, blood uric acid, fasting urine examination, urine tolerance test, examination of the nose and throat, transillumination of the sinuses, exam-

ination of the teeth, complete physical examination. Complete instructions are given as to diet, habits of eating and rest, and how to live. In doing all this, the patient is seen on four successive days. The work takes much time.

99 Bay State Road.

Blitzkrieg vs. Conventional Warfare on Syphilis*

By THEODORE ROSENTHAL, M.D., Director, Bureau of Social Hygiene, Department of Health, New York City

THESE methods are now being used experimentally in the treatment of early syphilis: (1) The "five day" treatment using the continuous, intravenous drip method with Mapharsen and an optimal total dose 1,200 milligrams, (2) The multiple injection method with 2 injections being given the first day and one daily thereafter for 7 days, together with 3 fever treatments, (3) The one day treatment, which includes an intramuscular injection of 4 Gm. of insoluble bismuth, ten hours treatment of fever at 106° F. and the intravenous administration of 240 mg. of Mapharsen during the first seven hours of fever and (4) The frequent injections of Mapharsen and bismuth over a short period, such as 3 Mapharsen injections weekly for 8 weeks, together with 8 weekly injections of an insoluble Bismuth compound.

All of these intensive massive dose treatments have been carried out on early cases of syphilis. Such methods of therapy are in process of study. Syphilis is a treacherous disease; only years of careful observation of a large number of cases thus treated, for at least 5 years, will demonstrate the real value of these "blitz" methods.



ILLUSTRATIONS

Typical manifestations of the three stages of the disease, courtesy of the New York City Dept. of Health.

Top—Primary syphilis (chancre)

Center—Secondary syphilis

Bottom—Tertiary syphilis

*Illustrations and information furnished by the author; abstracted from *The Trained Nurse*, Jan. 1943.

The Treatment of Intestinal Protozoa and Helminths*, Part I

E. C. FAUST, Ph.D.; J. S. D'ANTONI, M.D.; W. G. SAWITZ, M.D.

Department of Tropical Medicine,
Tulane Medical School, New Orleans, La.

Treatment of Infections With Intestinal Helminths

ASCARIS LUMBRICOIDES

Location: Lives free in the small bowel.

Drug of Choice: CAPROKOL (hexylresorcinol crystoids) is the drug of choice and is essentially non-toxic.

Efficacy: Elimination of about 90-100 per cent of the worms.

Preparation: Obtained as crystoids (Sharpe & Dohme) each containing 0.1 gm. or 0.2 gm., hard gelatin coated.

Dosage: Adults, 1 gm.; children one to five years of age, 0.6 gm.; six to ten years, 0.8 gm.

Method of Administration: Give the drug on an empty stomach in the morning. Do not allow patient to chew tablets. No food is allowed for five hours after administration. Pre- and post-treatment: Glauber's salt purgation is not absolutely necessary but is desirable to clean out the bowel and to evacuate disintegrating worms.

Contraindications: Essentially none.

Secondary Drugs: OIL OF CHENOPodium is the second drug of choice. Must be given with tetrachlorethylene in dosage of 2.7 cc. of tetrachlorethylene and 0.3 cc. of oil of chenopodium. Pre-treatment and post-treatment saline purgation is essential. (SANTONIN is inefficient and quite toxic, especially to children.)

HOOKWORMS

(*Necator Americanus*, *Ancylostoma Duodenale*)

Location: Attached typically to the wall of the median one-third of the small intestine.

Drugs of Choice: (1) TETRACHLORETHYLENE is well tolerated and in uncomplicated infections is by far the best drug. (2) If complicated by *Ascaris* infection, it is better to use CAPROKOL. (Tetrachlorethylene has no lethal effect on *Ascaris* but may activate them.) If severe anemia is present specific antianemic treatment followed by caprokol therapy is advised. With either drug a second treatment can be given safely within one week.

The Bulletin of the Tulane Medical Faculty, Feb., 1943. By Permission of Dr. Faust.

Efficacy: Elimination of about 90-95 per cent of all worms is obtained with one course of tetrachlorethylene treatment; about 75 per cent with caprokol crystoids.

Preparation: (1) Tetrachlorethylene is obtained in soluble gelatin capsules (Parke Davis Co., Lilly), each containing 15 minims (1 cc.). (2) Caprokol, as recommended for *Ascaris*.

Dosage: (1) Tetrachlorethylene: adults, 3 cc.; children, 3 minims per year of age up to adult dose; (2) caprokol: as recommended for *Ascaris*.

Method of Administration: (1) Tetrachlorethylene. Efficiency of treatment depends on the completeness of bowel evacuation before specific therapeutics, but hyperperistalsis should be avoided. One level to heaping tablespoonful of sodium sulphate (Glauber's salt), dissolved in water, is given the night before (half dosage for children). In the morning on an empty stomach the full prescription is taken. Nothing is given by mouth until two hours later, when Glauber's salt purgation is repeated. Patient must remain in bed and no food is given until a copious bowel movement has been obtained. (2) Caprokol. As recommended for *Ascaris*.

Contraindications: For tetrachlorethylene, pregnancy, hyperpyrexia, insanity, lung, liver and kidney disease or where *Ascaris* is present; for caprokol, essentially none.

Secondary Drugs: CARBON TETRACHLORIDE in the amount of 3 cc. for adults, 3 minims per year of age for children, with pre- and post-treatment Glauber's purgation. The patient should be hospitalized and carefully watched during the period of treatment. This drug is contraindicated in hepatic, renal and respiratory diseases, hyperpyrexia, chronic alcoholism and serum calcium deficiency. The patient should take no alcohol or absorbable fat for 48 hours preceding treatment. (THYMOL is less efficient and equally toxic.)

TAPEWORM

(*T. Saginata*, *T. Solium*,
Diphyllobothrium Latum)

Location: The adult worm is located in the middle portion of the small in-

testine, with its head attached to the bowel wall.

Drug of Choice: **OLEORESIN OF MALE FERN** (*Aspidium filixmas*) is the drug of choice.

Efficacy: Is directly proportional to the care of the physician in the administration of the drug, and intelligence of the patient; theoretically 100 per cent efficient, *provided the drug is fresh.*

Preparation: Prescribed in soft gelatin capsules of 10 minims each. The drug may also be given in a teaspoon with sugar.

Dosage: Adults, for oral administration, 30 to 60 minims (not to exceed 60 minims); children, 1 minim of the drug for each year of age (not to exceed the adult dose).

Methods of Administration: For routine oral treatment with the oleoresin of male fern, the patient is prepared the night before by Glauber's salt purgation (as in hookworm infection). The drug is administered the following morning, on an empty stomach, in three doses at 7:00 a.m., 7:30 a.m. and 8:00 a.m., each dose containing one-third of total dosage advocated. Follow two hours later with another Glauber's salt purge. The patient must be kept in bed, or, better, hospitalized during the treatment. After copious bowel movement, soft food may be allowed. Search all specimens of stool up to 48 hours for the minute head and neck of the worm, which are usually passed separately from the major portion of the worm.

In cases where the above prescription does not eradicate the worm, the following emulsion may be orally administered in the morning on a fasting stomach, following Glauber's salt purgation the preceding night: Oleoresin of male fern, 4 cc. (60 minims); mucilage of Acacia, 30 cc.; sat. sol. Glauber's salt, 30 cc. This is taken as single dose and requires no post-treatment purgation.

Where a physician has ready access to a fluoroscope or is familiar with the technic, transduodenal intubation of the above emulsion of oleoresin of male fern is very satisfactory. The tube is placed in position and the emulsion introduced into the duodenum. No post-treatment purgation is required.

Contraindications: Pregnancy and nephritis.

Secondary Drugs: See "Secondary Drugs" (carbon tetrachloride) under "Hookworms."

DWARF TAPEWORM (*Hymenolepis Nana*)

The dwarf tapeworm lives in the mid-

dle portion of the small intestine. **CAPROKOL**, as recommended for *Ascaris*, is advocated. If the patient does not become free of infection, use **OLEORESIN OF MALE FERN**, as recommended for *Taenia*.

STRONGYLOIDES STERCORALIS

Location: Lives in the mucosa of the upper small bowel.

Drug of Choice: **GENTIAN VIOLET** (medicinal).

Efficacy: Clinically always helpful but does not necessarily remove all the worms.

Preparations: Seal-Ins coated gentian violet tablets (medicinal), one and a half hour coating (Seal-Ins Laboratory, Los Angeles, California), each ½ grain.

Dosage: 1 grain (2 tablets) t. i. d. before meals for 16 days. Children same as adults.

Method of Administration: After medication has begun, if one of the following symptoms is noted, it is best to stop treatment, at least temporarily: (1) severe epigastric pain, (2) pronounced persistent nausea, (3) violet discoloration of urine.

If difficulty is encountered in ridding a patient of larvae, and two to three rounds of tablets have proved inadequate, success may be attained by intubating 25 cc. of a 1 per cent solution of gentian violet (medicinal) into the duodenum. Almost immediately after intubation, vomiting and diarrhea are likely to ensue. Patient should remain quiet for an hour or two after treatment.

Contraindications: Essentially none.

Secondary Drugs: None.

OXYURIS, PINWORM, SEATWORM (*Enterobius Vermicularis*)

Location: Lives attached to the wall of the lower levels of the small bowel, appendix and cecum. Gravid females migrate down the bowel and crawl out the anus onto the perianal and perineal skin, mostly at night, where they can be recovered.

Drug of Choice: **GENTIAN VIOLET** (medicinal).

Efficacy: One full course of treatment usually serves to eliminate 80 to 100 per cent of the worms.

Preparation: Gentian violet (medicinal), Seal-Ins, four-hour coating.

Dosage: Adults, 1 grain (2 tablets) t. i. d. one hour before meals; children under 100 pounds, 1 tablet t. i. d. The prescription is given for eight days; it is then discontinued for one week and is repeated for another eight days.

Method of Administration: Treatment should be discontinued if (1) severe epigastric pain, (2) persistent nausea, or (3) violet discoloration of the urine develops.

TO THOSE ENTERING SERVICE

Contraindications: Pregnancy, nephritis. Until these conditions have cleared up, plain or soapsuds enemas may be given palliatively.

Secondary Drugs: CAPROKOL, as advocated under "Ascaris," combined with retention enemas of hexylresorcinol solution (S. T. 37 undiluted). One gram of the crystoids is given on an empty stomach in the morning. Immediately following, the lower bowel should be cleaned out by a tepid enema. After complete evacuation of the bowel a high enema of hexylresorcinol, in a dilution of 1:1000 (S. T. 37 undiluted), one pint, is given and should be retained as long as possible. If spasticity of the colon or tenesmus is pronounced, the colon should be washed out immediately with warm water. Aqueous solution of Merthiolate (Merck) in a dilution of 1:1000 may be substituted but it is not as satisfactory.

Note: Unless all infected individuals in a family or institutionalized group are treated for pinworms at one time, reinfection of the treated patients is apt to occur.

WHIPWORM

(*Trichocephalus Trichiurus* or *Trichuris Trichiura*)

Location: Lives attached to the mucosa of the cecum and appendix.

Drug of Choice: LECHE DE FIGUERON.

Efficacy: 75-100 per cent.

Preparation: This drug is not on the market in the United States. In Latin America it is preserved with one per cent sodium benzoate and sold under the trade name "Higueronia". It is the milk from a fig tree found in Central and South America.

Dosage: 2 ounces will usually rid the patient of infection.

Method of Administration: The bowel, particularly at the level of the cecum, must be thoroughly cleaned out before specific medication. Give 2 ounces of the milk before the patient retires and follow with a little water. No purgation is necessary after medication.

Contraindications: Essentially none.

Secondary Drug: Repeated courses of TETRACHLORETHYLENE, as recommended for hookworm, are fairly satisfactory, provided the bowel has been thoroughly cleaned out beforehand.

To Those Entering Service

1. Take inventory and store away all equipment.
2. Return all narcotics for credit or store securely.
3. Complete and file all case histories with a responsible person.
4. Keep record of all accounts receivable and payable; explain them to personal representative.
5. Request leave of absence, in writing, from hospitals and medical school affiliations.
6. Notify professional publications and societies of change of address.
7. Notify all patients either through personal calls or printed announcements.
8. Arrange cancellation of rent, or sublease promptly.
9. Cancel all services, such as lighting, heating, telephone, and laundry.
10. Provide employees with letters of recommendation.
11. Arrange for continuance of professional protective insurance service (war service does not release one from previous obligations).
12. Take along favorite instruments, e.g., stethoscope, ophthalmoscope, etc.
13. Readjust family budget; do not move family except when necessary, and then not to training center.
14. Regardless of dependents, file a last will and testament.
15. Arrange power of attorney with a trustworthy person.
16. Place all important documents, including insurance policies, in safe-deposit box accessible to a close relative or attorney.
17. Check validity and continuance of all personal insurance policies. Their provisions pertaining to war service, should also be determined.
18. Wife or attorney should be provided with copy of marriage certificate, together with birth certificate of each member of the immediate family.
19. Permanent mailing address should be established in care of the wife, attorney, or other responsible person.—*The Merck Report*, Jan. 1943.



SYDENHAM

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Editorial

Sydenham

(The Founder of Modern Clinical Medicine)

FOR hundreds of years, up to the middle or latter part of the seventeenth century, Medicine was full of dialectics and an arena for jousting over pet theories while, in many instances, the sick man was neglected or forgotten. Hippocrates was in the discard and the Galenists and other propounders of hypotheses were in the saddle.

In 1624, at Wynford Eagle, Dorset, England, Thomas Sydenham was born into a well-to-do family of staunch Puritans. He was educated at Oxford and when the great rebellion broke loose, became a captain of cavalry in the Parliamentary army, where he served for four years.

When he was thirty-two years old, Sydenham decided to practice the profession he had studied, so he married and went to London where, after doing some "postgraduate" work at Montpellier, he was licensed by the Royal College of Physicians, in 1663.

His first book, a small volume entitled, "*Methodus Curandi Febres*," was published when he was forty-two years old and began with the restatement of the old Hippocratic *vis medicatrix naturae*, in this wise; "A disease, in my opinion, how prejudicial so ever its causes may be to the body, is no more than a vigorous effort of Nature to throw off the morbid matter and thus cover the patient." This was his creed.

We, of today, have just been going through a period of the apotheosis of the laboratory and all its works. Harvey, Vesalius and their like have been our gods, and anatomy, physiology and pathology have received far more attention in our schools than that devoted to the care of sick people. Now the pendulum is swinging and we are begin-

ning to overtake Hippocrates and Sydenham again.

A Typical Saxon, with a large fund of "common sense" and a keen interest in and sympathy for suffering human beings, Sydenham cut loose from all the theories of the academic researchers, sat down by the bedsides of his patients and studied *them* and their diseases, classifying them as a botanist or zoologist would work out genera and species, until he figured out what line of treatment was indicated in *that particular case* . . . He was the typical clinician, and his *methods*, if not his basic ideas, have a distinctly modern flavor.

Studies in the influence of climate, geography and other factors upon the spread of diseases (his treatise on scarlatina, giving the malady, its name, is a classic) brought him, posthumously, the designation of "Father of Epidemiology"; his work on gout (from which he, himself, suffered) is esteemed his masterpiece; he wrote, soundly, upon pneumonia, dysentery, chorea, hysteria and various other subjects, popularized the use of Peruvian bark, employed chiefly vegetable drugs, and was the instigator of the modern, humane method of treating fevers, using fresh air, baths and cooling drinks, which was the height of heterodoxy in those days.

Sydenham was so thoroughly out of sympathy with the Medicine of his time that he was far from popular with his confreres, which, while it grieved him, was the very secret of his success as an internist. He held himself "answerable to God" for the welfare of his patients and possessed a power of imaginative sympathy rare, indeed, in men of his type.

He who is over-conscious of his own importance is untrue to himself.

—GEORGE STEELE SEYMOUR

Importance of Parasitology

ALL animals are constantly competing with other animals for ultimate survival. This competition goes on not only among the numerous individuals within a single species but also between the representatives of different species. Man hunts for certain game animals or even propagates some forms with the express purpose of using their flesh as food for himself. At the same time he must—in a broad biologic sense—be ever cautious that he himself be not devoured by other animals stronger or more numerous than he.

As a species, man has been successful in overcoming all the animals of the field, forest, and jungle as well as of the sea, and he no longer holds any of these forms seriously in dread. Certain other species of animal life exist, however, from which man has been much less successful in defending himself. These are the parasitic forms. Although the parasitic animals have no notable physical strength, they are admirably adapted in one way or another for survival, usually under the closest possible association with human beings. And, despite the fact that his parasites are feeding upon his own body substance or food he has eaten for himself, man may be unaware of their presence within or near him. Sometimes, he is less fortunate, and suffers prolonged torture from an insidious foe from which he cannot free himself.—JAMES T. CULBERTSON, M.D., in "Medical Parasitology" (Columbia University Press, 1942).

Only that part of Truth is revealed to us that we ourselves are equipped to receive.

—MANLY P. HALL.

Free Choice

ONE of the pet phrases used by the defenders of the present method of medical practice is that the patient must have free choice of physician.

But does he have free choice? Such a freedom implies that the average patient knows about the various physicians and what they can do; for how can one make a worthwhile decision without knowledge?

In a town or small city, the patient may know the physician personally. At

least, he knows patients who have been under his care and he has heard their opinions, favorable or unfavorable, based on evidence or guesswork. In the large city, the patient can be guided only by rumor; by the fact that the physician has an office handy, that he has cared well for an acquaintance; that he is "supposed to be good." The latter are actual reasons given by patients.

The man who will watch a radio mechanic at work and not be afraid to confess that he knows nothing at all of what is going on, will often judge a physician in a few minutes. The physician deals in ideas, and does his most important work, in the sifting of evidence and analyzing of facts, without moving a muscle. How can he be judged except by men who are as well trained as himself?

How can a layman know if he is getting good medical care? Anyone can see artificial respiration save a life, but no one can see the delicate judgment that calls for or withholds an operation; the thoroughness of examination or the care used in differential diagnosis.

This problem becomes more acute, as medical science becomes more removed from the common experience of men. In the older days, one could tell by the practised manner of the physician's approach to a fracture or a fever whether he was accomplished or not. The physician did not expect to cure, but to relieve. Under such circumstances, the best could do little better than the worst.

Today, although we do not cure as often as we would like, hundreds of diseases are curable. But, to be cured, they must be *thought of*. The physician must work hard unraveling the clues to their discovery; the surgeon who operates must then watch the patient carefully for complications. *Both must constantly study to keep up with new advances and to retain the old.*

Remedy: To have true free choice, the patient should be able to obtain a list of physicians showing what their field of interest or specialty is, how much postgraduate study they carry out each year or two, what their average fees are and if they have been judged proficient by other physicians.

The way to have a genius at home is to take time to cultivate one.—ROBERT QUILEN.



CLINICAL NOTES and ABSTRACTS

Microfilm copies of any of the published papers here abstracted, up to 25 pages, may be obtained for 25 cents from Microfilm Service, Army Medical Library, Washington, D.C.

Hematuria; Its Clinical Significance

Hematuria is frequently underestimated in its importance by the patient, and, unfortunately, by his physician.

The presence of gross blood in the urine is usually sufficient to cause the patient to seek medical advice. However, when the hematuria is intermittent, the cessation of the bleeding lulls the patient into a false sense of security and he may presume that he is well. To the physician, however, this subsidence of hematuria is no indication that its significance is to be minimized. A complete urologic investigation should not be delayed.

Hematuria is often the outstanding symptom. Often it is the only complaint, and at other times the blood may be found only upon microscopic examination. Fortunately, the bleeding in many instances is associated with concomitant symptoms. The presence of other symptoms often causes the patient to seek investigation and medical advice earlier than does the recognition of blood in the urine, although from the urologic point of view, the latter may be more serious. First among the symptoms is pain. Other complaints accompanying the hematuria may be burning and frequency of urination, chills and fever, sweats, the presence of a mass, loss of weight, history of trauma, etc.

The following tabulation and grouping has been found very useful in classifying hematuria and emphasizes the most important causes of hematuria.

1. Hematuria in general disease

A. Acute fevers: Tonsillitis, scarlet fever, rheumatic fever, etc.

B. Chronic infections: Endocarditis (renal infarction), malaria

C. Blood dyscrasias: Purpura, leukemia, hemophilia, polycythemia vera

D. Deficiency and dietary disease:

Scurvy and liver deficiency

E. Diseases of unknown etiology:

Hodgkin's disease, hypertension or arteriosclerosis with renal involvement, periarteritis nodosa

F. Following medication: Sulfonamides, methanamine, salicylates, barbiturates, mandelic acid, etc.

2. Hematuria due to intrinsic diseases of the urinary tract

A. Renal

1. Calculi or crystals

2. Nephritis

3. Tumor—capsular, parenchymal, pelvic

4. Infection—acute or chronic including tuberculosis

5. Anomalies—polycystic disease, horseshoe kidney, nephroptosis, etc.

6. Trauma

B. Ureteral

1. Calculi

2. Infection

3. Stricture

4. Tumor

C. Vesical

1. Tumor

2. Infection

3. Calculi or foreign bodies

4. Ulcer

5. Trauma

D. Bladder neck

1. Prostate including seminal vesicles

E. Urethral

1. Infection

2. Stricture

3. Tumor

4. Following instrumentation

3. Hematuria associated with extra-urinary pathology

A. Acute appendicitis

B. Diverticulitis of the colon

C. Neoplasm of the colon, rectum, or pelvic structures

D. Acute or chronic salpingitis

This classification is by no means exhaustive; *practically every disease of the urinary tract at some time or other may be accompanied by hematuria*. It does indicate, however, the extensive investigation which may be necessary to uncover the etiologic factor producing blood in the urine. Complete study of the urinary tract is essential; this includes cystoscopy, estimation of the individual kidney function, examination of specimens of urine from each kidney, pyelography, and intravenous urography. With these procedures in addition to the routine physical examination and routine laboratory examination, an accurate diagnosis can be established in the vast majority of cases, and appropriate therapy instituted early in the course in the disease. CHARLES C. HIGGINS AND PHILIP R. ROEN, *Cleveland Clinic Quarterly*, Mar. 1943.



Medical Care of Executives

The mortality rate of executives, physicians, and other over-burdened brain workers and the incidence of serious degenerative diseases among them appear to be much higher than among laborers. *One executive in five suffers from duodenal ulcer, one in eight from high blood pressure and one in twelve from angina, gout or diabetes. The more successful and hard-working a man is, the shorter his life is likely to be.* Someone may ask "How may mental work, emotion and fatigue produce such definite and fatal injuries to the body tissues?" There is much that is unknown but it has been established that disturbing emotions lead to the formation in the body of a number of powerful drug-like substances which produce troublesome symptoms.

Emotion can also produce spasm in small arteries and with this there can go a dangerous impairment of the blood supply to parts of the brain, heart, kidneys, stomach or joints. There is no doubt today that worry and mental strain can give rise to illness or can bring about flare-ups in the course of degenerative diseases.

Because many executives and physicians cannot take time off a month at a time they are best advised to leave their work every so often for a few days. Any good executive should learn to delegate authority to his assistants. If an executive lets himself be driven every

minute of the day by the problems of the moment, his company will soon start dropping back in the race.

Bad Habits of Executives: They not only work too long hours in the office, but most of their time outside is taken up with talking shop and making contacts which will be helpful to them in their business. The usual executive is a man who lives intensely and does strenuously whatever he sets out to do. Often he eats too much and this tends to bring disaster. It adds to the load on the heart and kidneys, and development of degenerative diseases such as diabetes, high blood pressure and gout.

Most executives tend to smoke too much. Statistics show that between the ages of thirty and fifty years, one out of five heavy smokers dies before his time, which suggests that *heavy smoking is even more harmful than is fairly heavy drinking*.

Many, waste nervous energy in becoming angry. The executive cannot afford to get angry at anyone.

Seven per cent of a group of executives had syphilis.

Danger Signals: Common symptoms are (1) A sense of impaired health and energy, getting up tired in the morning, wearing out by noon; (2) Insomnia; (3) Increasing irritability; (4) The putting off of making decisions. A man may feel faint, dizzy, or chilly or uncertain of himself. He may break into a sweat or find his heart throbbing wildly.

A man with such symptoms should stop immediately and get a rest. He is so close to the edge of a nervous breakdown that any little cold or accident may take him over the edge.

Examination: A history, physical examination, urine examination, Wassermann test, and hemoglobin content of the blood should be done.—W. C. ALVAREZ, M.D. in *Ill. Med. J.*, Apr. 1943.



Dilantin for Asthma

Dilantin (phenytoin sodium) Sodium,* the anticonvulsant being used successfully in the treatment of epilepsy, has been somewhat effective for asthma.

In the treatment of children this dosage was employed: Initial dose, $\frac{1}{2}$ gr. (0.032 Gm.) twice daily; if symptoms persisted, the dose was increased to $\frac{1}{2}$ gr. three times daily. A dose as high as 3 grains (0.2 Gm.) daily was necessary for several children. Its use leads to an

*Dilantin Sodium is manufactured by Parke Davis Company.

improvement in the personality of the patient; thus, it may be used in the treatment of patients in whom a psychogenic factor exists.

Toxic symptoms: nausea, vomiting, nervousness, tremor of hands, drowsiness, headache, ataxia, dermatitis and hypertrophy of the gums. — *J.A.M.A.*, April 17, 1943.

Hemorrhage or Shock: Use of Radial Artery

A patient in severe shock, or during severe bleeding, needs replacement of blood volume preferably with blood serum or plasma. The collapse of veins renders them difficult to enter, especially in fat persons. Lejars* many years ago suggested a solution: Cut down on the radial artery at the wrist, place loops of catgut or silk above and below and insert needle or cannula for administering blood or solution.

[The radial artery is subcutaneous in almost its entire course, and may be exposed by a simple incision (see Fig. 1). There are no important nerves in this area; only the tendon sheaths must be watched for. There is no fear of overloading the right side of the heart.]

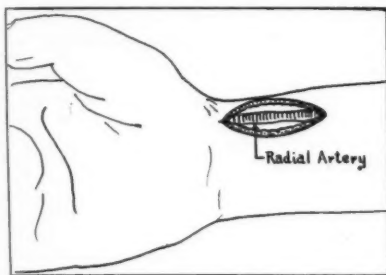


Fig. 1. Incision for arteriotomy of the radial artery at the wrist (after Davis), for use in quick administration of blood or solutions in hemorrhage or shock.

Vitamins in Surgery

Vitamin deficiencies are usually multiple rather than single. All seriously ill patients should receive 1,000 mg. of cevitamic acid (preferably intravenously) daily for several days preceding the operation where possible, and for as long afterward as they are unable

*Lejars, Felix: *Urgent Surgery*. Third Edition. New York: William Wood & Co. 1915.

to take a balanced diet. Injectable vitamin B complex (50 mg. thiamin, 50 mg. nicotinic acid amide, 10 mg. riboflavin) should be given daily, together with 1 or 2 mg. of parenteral vitamin K.

Mineral oil should not be given for a prolonged period because it interferes with absorption of the fat soluble vitamins.—E. F. GOOEL, M.D. in *West. J. Surg.*, May 1943.

Adrenal Cortex for Premature Infants

The premature infant, who loses ground and dies, for no apparent reason, 12 to 48 hours after birth, has always been an enigma. At autopsy little can be found except prematurity, although occasionally, hemorrhage in the adrenal gland is found. The appearance of these infants suggests shock. Blood studies show concentration of the blood, reduced blood volume and peripheral vasoconstriction.

Preceding the delivery of a premature infant, the mother is given 5 to 10 cc. of adrenal cortex extract (12.5 to 25 rat units). Immediately after delivery, the infant is given 2 to 5 cc. of the adrenal cortex extract intramuscularly. This dose is repeated daily for 5 days. —*West J. Surg.*, Jan. 1943.

Case Report of Maternal Death*

The patient, an 18 year old primipara, registered in the clinic on June 12, 1941, at which time she was about seven months pregnant. She was very obese, blood pressure 110/75 and a trace of albumin in the urine. She returned every two weeks for prenatal care and on July 17 her blood pressure was 130/90. There was one plus albumin in the urine and she had gained six pounds in weight. On July 23rd a physician was called to her home on account of convulsions, blood pressure 164/122. She was given morphine grains 1/6 and 2 cc. of 50 per cent solution of magnesium sulfate intramuscularly and referred to the hospital.

Patient was admitted to the hospital at 11:45 A.M. on July 23, 1941, with a history of having had two convulsions the night before admission and one convulsion on the day of admission. She had had edema of the feet and legs for a month. On admission she was mentally clear, blood pressure 160/110, Wassermann negative, R.B.C. 4,100,000, hemoglobin 75 per cent, and W.B.C. 12,600. On July 25th, two days after admission,

she was improved except for limited urinary output, the toxemia apparently being controlled, blood pressure 140/104. An attempt was made to induce labor on July 25th by manually dilating the cervix using a Hegar dilator, and inserting a No. 5 Voorhees bag. A two and one-half pound weight was then attached to the bag. Morphine grains 1/6, and Scopolamine grs. 1/200 were given before the operative procedure was started. The bag was removed from the vagina eight hours after its insertion. The membranes ruptured spontaneously and an arm prolapsed into the vagina. This was replaced and under Cyclopropane anesthesia a tenaculum was attached to the baby's scalp. On the following day, July 26th, the blood pressure was 186/128. The patient had been semi-comatose since the administration of the anesthesia. The head was high in the pelvis. There had been almost complete anuria for the past twenty-four hours. At this time, after consultation it was decided to treat the toxemia and make no further attempts at delivery. Although she had never been in labor it was decided, eighteen hours later, on July 27th, to attempt delivery as a last resort, after 1/100 grs. of Scopolamine was given. The vertex was above the spines and there was a thin but firm rim of cervix present. To avoid lacerating the cervix a craniotomy was done. Her condition remained poor following delivery, coma persisting, and she died three hours later. During her stay in the hospital she was given either 300 cc. of 25 per cent glucose or 200 cc. of 50 per cent glucose daily for anuria. She also received 20cc. of 10 per cent solution Magnesium Sulfate intravenously on the 23rd, 24th, and twice on the 26th. Her temperature was 100 until the 25th and then remained between 101 and 103 being septic in character until she died.

Comment

This has been classified as a preventable death by the committee. Prenatal care was inadequate. This was a relatively mild case of eclampsia according to Eden's classification, and we believe should have recovered. *She was recovering from the toxemia, the convulsions having been controlled and the blood pressure improved when operative interference was instituted.* This case illustrates the importance of treating the disease, waiting to empty the uterus until the kidneys are functioning well. There seems to be no definite course of treatment in this case and no mention is made of the use of digitalis and oxy-

gen, two recognized valuable aids in the treatment of this disease. The mortality from toxemia has been greatly reduced and no longer occupies first place in maternal mortality in the State of Virginia. This should and can be further improved by closer supervision of our cases and continued conservation in treatment.

*Va. Med. Mon., May 1943.

Sigmoidoscopy Pointers

A patient may be well studied with just the use of a flat table, with the patient placed in the knee chest position. These cautions are to be remembered: (1) Never use the inflation apparatus, because of the possibility of perforation; (2) Use plenty of lubricant and explore well with the index finger before introducing the sigmoidoscope; (3) Do not push the instrument in blindly—advance it under guidance of the eye; (4) Spasm of the bowel is treated by local application of 25 percent magnesium sulphate solution with a cotton applicator, which is pressed gently forward; if unsuccessful, insert a soft rubber urethral catheter and inject two ounces of the solution; (5) Make free use of long wooden applicators correctly wrapped in cotton—I have frequently located a growth which was high up in the sigmoid by having the applicator return repeatedly blood colored, although the x-ray had disclosed nothing; (6) In dilating the rectal sphincter for spasm or stricture, make your pressure always upward toward the coccyx (in knee chest position), thus avoiding the pain produced by pressing laterally or toward the perineum.—H. W. SOPER, M.D. in *Am. J. Dig. Dis.*, May 1943.

Smallpox Vaccination Reactions

Reactions to smallpox vaccination include: (1) vaccinia, (2) vaccinoid and, (3) immune reaction.

Vaccinia (primary take): The reaction obtained when one who has no immunity is vaccinated with a potent cowpox virus. The vaccination area should not be larger than 1/8 inch. If the multiple puncture method is used, practically nothing can be seen at the site for 2 to 4 days, then macules appear, which are followed promptly by papules, which come together as the vesicle forms. By the ninth day, a pustule surrounded by a red areola is usually present. A scab forms following the pustule. If the original vaccination site was not more

than $\frac{1}{8}$ inch and if no dressing is used, the scar will be no larger than $\frac{3}{8}$ inch.

Vaccinoid: The vaccinoid or accelerated take indicates a partial immunity to smallpox; it occurs in those who have had smallpox, successful vaccination or vaccinoid. Some persons on re-vaccination every 7 years will have a succession of vaccinoid reactions, each of which will leave a scar. Such scars are usually smaller than the scar following the primary take. Vaccinoid appears like a true take except much faster in development and with little local or systemic reaction.

Immune reaction: If a small thickened area develops at the site of vaccination, which comes on 12 hours afterward and lasts for 2 or 3 days, the individual is immune.

Every properly done vaccination with a potent virus results in one of these reactions. If the immune reaction does not appear on the second day, the vaccination should be looked at again on the fifth or sixth day. Large scars and extremely sore arms are usually caused by secondary infection; they do not indicate that more immunity has been obtained. — L. B. GLOYNE, M.D., in *J.A.M.A.*, June 5, 1943.

Ketosis

Ketosis can occur in health or disease. The increased knowledge and the better understanding that has come to us during the past few years out of the laboratory of the experimental physiologist and bio-chemist is, when the liver is depleted of a normal supply of glycogen it will proceed immediately to break down fats and proteins, for energy requirement or the organism. Once begun, this process goes on to a degree that produces increasing amounts of ketones. This can occur in health within a period of 3 hours, as in our Marathon runners, and it occurs in disease; the pathologic physiology is the same, regardless of the duration or circumstance of its development. When formation of ketones exceeds the rate at which they can be eliminated, accumulation in the tissues will follow, the ketosis and coma will result. This coma can be overcome by giving the patient glucose, insulin and water. Glucose as material for the manufacture of glycogen and the restoration of a normal chemistry within the liver, insulin to make this conversion possible, and water to facilitate the exchange. While this is in the process of restoration, ketones are being

eliminated and oxidized, the excessive breaking down of fat ceases and a normal chemistry is restored.—J. H. BARACH, M.D. in *Am. J. Dig. Dis.*, Apr 1943.

Diagnosis of Migraine

Migraine is readily diagnosed if the cardinal features are kept in mind.

Headache	Location: Any portion of head, often frontal; unilateral or bilateral Type: Severe With: Prostration Time: Periodic (brain tumor involving the optic nerve may give visual symptoms but not periodically)
Nausea, vomiting	Time: Always occur following the headache Type: Persistent
Family history	A family history of the disease is often given
Aura:	A sensation precedes the onset of the headache: lights before the eyes, numbness or tingling in the extremities.

—J. W. SCOTT, *Canad. Med. A. J.*, Dec. 1942.

Sulfathiazole for Impetigo

The use of fine crystals (microcrystals) of sulfathiazole stops the spread of impetigo within 24 hours. A twenty per cent suspension is used. A drop or two is poured onto a small gauze dressing, the water draining into the gauze and the fine crystals remaining on the surface. The dressing is placed over the lesion, after preliminary scrubbing with soap and water. Several such treatments at 24 hour intervals, usually result in a cure.—T. N. HARRIS, M.D. in *J.A.M.A.*, Feb. 6, 1943.

The products we advertise are worthy of your attention. Look them over.

Spinal Anesthesia Precautions

Before administering a spinal anesthetic, one should examine the patient's nervous system. If the pupils react sluggishly to light or do not react at all, do not employ a spinal anesthetic. The history of a previous organic central nervous system disease, or a careful examination revealing any cerebral or spinal cord disease, definitely contraindicates spinal anesthesia—E. N. HAMME M. D. in *Minn. Med. Apr.* 1943.

DIAGNOSTIC POINTERS



Delayed Wound Healing

• Delayed healing of wounds may be due to (1) too tight suturing, (2) use of too much suture material and (3) movement of the wound edges due to lack of splinting. Systemic causes such as anemia and diabetes cause poor healing. A slowly healing wound or one which appears abnormal should suggest a foreign body (a non-absorbable suture such as silk, an instrument or insufficient cleansing of the wound), tuberculosis, actinomycosis or other wound infection, or malignant tissue in the walls or base of the wound.—*Tri-State Med. J.*, Nov. 1942.

(Nutritional causes for delayed wound healing include (1) protein deficiency, which can be corrected by giving transfusions or the new amino-acids intravenously, or a meat and egg diet, and (2) vitamin C deficiency, which is readily corrected by giving 1,000 mg. daily of ascorbic acid (synthetic vitamin C) for 3 days and then 100 mg. daily for a week or more.—Ed.)

Whistle-Smile Reflex in Parkinsonism

• When the normal individual is requested to whistle, he does so and then smiles, probably as a response to the absurdity of unmotivated whistling. The patient suffering from the Parkinsonian syndrome does not smile after whistling. This is a helpful, reliable sign.—F. M. HANES, M.D. in *J.A.M.A.*, April 3, 1943.

Dental Infection After Removal of All Teeth

• A focus of infection may be found in the mouth of a patient who has had all his teeth removed. Impacted or unerupted teeth, fragments of roots, perialveolar abscesses, cysts and residual areas of infection remaining after tooth extraction, can only be detected by x-ray.—F. G. REPASS, M.D., in *Med. World*, (Lond.) Nov. 27, 1942.

The oldest record of physicians blaming bad teeth for causing disease is an Assyrian manuscript of the seventh century B.C.—SCIENCE NEWS LETTER.

Significance of "Colds"

• Frequent "colds" which last only a day or two may indicate an allergic condition. More than 2 colds lasting over 10 days, during the previous year, suggest sinusitis. The presence of discharge, with yellow or greenish color between colds, also suggests sinusitis. Headaches, always located in the same place, have the same significance. Cough or "hawking" up of discharge may indicate a postnasal drip from infected sinuses.—W. D. CHASE, M.D. in *E.E.N.T.N.*, Apr. 1943.

Tachycardia

• A normal man should not have a pulse faster than 80 beats per minute. If the rate of an otherwise normal non-obese man remains continuously between 80 and 100, he should be studied for evidences of latent hyperthyroidism, slight myocarditis or of fever.—C. P. EMERSON, M.D. in "Physical Diagnosis" (J. B. Lippincott Co.)

Rapidly Enlarging Breast Tumor

• Early pregnancy may cause the sudden enlargement of a benign or malignant tumor of the breast; do not forget to inquire concerning menstrual history.—C. F. GESCHICKTER, M.D., in "Diseases of the Breast" (J. B. Lippincott Co., Publishers).

Depth of Anesthesia Measured by New Sign

• Pinching the tongue causes a dropping of the lower jaw. This linguo-maxillary reflex is a constant one. Unlike the other signs (corneal, pupillary), it gradually disappears as anesthesia or unconsciousness deepens. Thus it serves as an exact gauge of depth of anesthesia. It may also be used to measure the unconsciousness following head injury and coma from medical causes.—J. BLAIS, M.D. in *Anesth.-Anal.*, Jan-Feb. 1943.



THUMBNAIL

THERAPEUTICS

Surgical Treatment of Dysmenorrhea

• 85 per cent of patients with severe dysmenorrhea are relieved by presacral neurectomy. Objections to the procedure on the basis of change in libido, change in flow, change in response to intercourse, change in bladder or bowel function, or later sequelae are without statistical proof in this small series. Later deliveries are found to be much less painful.—ROBERT N. RUTHORFORD, M.D. in *West. J. of Surg.*, Dec. 1942.

Ringworm of the Feet ("Athlete's Foot")

• Whitfield's ointment (salicylic acid in benzoic acid ointment) cures dermatophytosis of the feet. Wet packs of potassium permanganate, 1-3000, should be used first if exudation is present, before the salve is used. In chronic exzematoid conditions of the foot, fungous in origin, crude coal tar paste, is often effective.—T. S. SAUNDERS, M.D. in *Northw. Med.*, May 10, 1943.

Acute Osteomyelitis

• Acute osteomyelitis should be treated by long rest in bed, plaster cast fixation of the affected part and oral sulfathiazole sufficient to maintain a blood concentration of 3 to 5 mg. per 100 cc. Incision is not carried out until pus has formed in the soft tissue.—C. DENNIS, M.D. in *Journal-Lancet*, May 1943.

Thyroid in the Menopause

The nervous symptoms and obesity of the menopause may be relieved by relatively small doses of thyroid extract ($\frac{1}{2}$ to 2 grains daily). There is a close relationship between the thyroid gland and the ovaries. The best test of the diagnosis of hypothyroidism in menopausal patients is to give gradually increasing doses of thyroid extract, as a therapeutic test.—"Index of Differential Diagnosis" (William Wood & Company).

Histamine for Meniere's Disease

• One-third of patients with Meniere's disease have been cured by the injection of histamine over a period of several years. Maintenance doses must be taken indefinitely.—BAYARD T. HORTON, M.D. in *Hahnemann. Month.*, Apr. 1943.

Estrogen for Premature Infants

• The injection of 500 units of Amnion (or other estrogenic substance) daily for not over 7 days into premature infants results in decreased weight loss, greater ability to take and assimilate milk and decrease in mortality rate. It is better given orally, if the infant can retain it, in doses of 500 international units.

Rationale: The blood of new born babies contains large amounts of estrogens, a baby born prematurely lacks the stimulus of the estrogens which would have been present normally in its blood had it remained in utero, and the hormone is rapidly excreted by the kidney and the urine is estrogen-free after four days.—A. J. QUICK, M.D. in *Wis. Med. J.*, June 1943.

Fluorescein for Eye Injuries

• A drop or fluorescein solution (obtainable at any pharmaceutical supply company) dropped on to the surface of the eye is absorbed by any injured or ulcerated area and becomes visible as a greenish sheen, the normal sclera and conjunctiva remaining yellow.—H. M. ROBINSON, M.D. in *Am. J. Dig. Dis.*, May 1943.

(The use of fluorescein has been common practice by ophthalmologists for many years, but general practitioners do not seem to be aware of its value. Small ulcers of the cornea and certain foreign bodies, such as glass splinters, can be seen clearly when stained.—Ed.)

Prostigmine for Glaucoma

• Prostigmine administration results in a lessening of tension in the glaucomatous eye. It is most effective in simple glaucoma. A three percent solution is well tolerated.—E.E.N.T.M., April 1943.

NEW BOOKS

Any book reviewed in these columns will be procured for our readers if the order, addressed to **CLINICAL MEDICINE**, Waukegan, Ill., is accompanied by a check for the published price of the book.

As good almost kill a man as kill a good book; who kills a man kills a reasonable creature, God's image; but he who destroys a good book kills reason itself, kills the image of God, as it were, in the eye.—MILTON

PSYCHOSOMATIC MEDICINE

Weiss, English

PSYCHOSOMATIC MEDICINE. The Clinical Application of Psychopathology to General Medical Problems. By EDWARD WEISS, M.D., Professor of Clinical Medicine, Temple University School of Medicine, Philadelphia, and O. SPURGEON ENGLISH, M.D., Professor of Psychiatry, Temple University School of Medicine, Philadelphia and London: W. B. Saunders Company, 1943. Price \$8.00.

It is unfortunate that this warm human text could not have had a more appealing title. Its real concern is with the everyday handling of patients—their physical and emotional problems. This is the field that the average medical and surgical text ignores; the treatment that the average physician overlooks, and the reason for the success of unscientific practitioners.

The authors show that a patient should not be considered as suffering from an organic disease or from emotional upsets, but that they should be examined and treated for both. The patient with high blood pressure, the nervous woman who is always tired, patients with "irritable colons," the peptic ulcer patient, the common problems of infant and child behavior, marital adjustments—all these are considered and many more.

The authors are not biased in favor of mental causation of symptoms, or even diseases, and indeed one will find many very new references to medical literature concerning "organic" diseases. The practitioner, who wishes to keep a balanced view of his patients' problems, must read this book.

NOXIOUS GASES

Henderson, Haggard

NOXIOUS GASES, and the Principles of Respiration Influencing Their Action. Second and Revised Edition. By YANDELL HENDERSON and HOWARD W. HAGGARD, of the Laboratory of Applied Physiology, Yale University. American Chemical Society Monograph Series. New York: Reinhold Publishing Corporation (330 W. 42nd St.) 1943. Price, \$3.50. The way that most people die is by cessation of respiration. The average man is interested in the principles of alimentation; he takes precautions in food and drink. But of respira-

tion and the gaseous substances which he takes into his body through his lungs, he is generally oblivious.

The authors have propounded a new classification of gases: (a) irritants, (b) asphyxiants, (c) volatile drug and drug-like substances and (d) inorganic and organometallic substances. This grouping is a functional rather than a chemical one.

The fundamentals of respiration are given, for the benefit of the engineer and the physician who have become rusty.

Each of the above mentioned group of gases is discussed, with individual references to each of the various gases encountered in industry. Methods of resuscitation and comparison of various treatments, and prevention of poisoning by noxious gases, are fully considered. The final chapter is devoted to a presentation of clinical and laboratory evidence definitely proving that the pulmonary and resuscitator are not only valueless but dangerous. Standard artificial respiration (prone pressure), as taught by the Red Cross and industrial safety groups, is the best treatment for asphyxia.

GYNECOLOGY

Wharton

GYNECOLOGY, With A Section on Female Urology. By LAWRENCE R. WHARTON, Ph.B., M.D., Associate in Gynecology, The Johns Hopkins Medical School; Assistant Attending Gynecologist, The Johns Hopkins Hospital; Consultant in Gynecology, Union Memorial Hospital, Hospital for Women of Maryland and so on. 444 illustrations. Philadelphia and London: W. B. Saunders Company, 1943. Price, \$10.00.

This is a practical, well illustrated text covering the field of gynecology and the closely related diseases of the female urinary tract.

The author emphasizes the importance of cervicitis and its treatment with the cautery. It is unfortunate that more illustrations of varying types of cervicitis are not shown.

The section on pruritis, always a difficult problem to treat, is very worthwhile. Gonorrhea in women is dismissed rather briefly.

The clinical and surgical sketches are excellent.

CLINICAL THERAPEUTICS

Cutting

A MANUAL OF CLINICAL THERAPEUTICS. By WINDSOR C. CUTTING, M.D., Associate Professor of Therapeutics, Stanford University School of Medicine, San Francisco. Philadelphia and London: W. B. Saunders Company, 1943. Price \$4.00.

The author has accomplished what has been declared impossible: Therapy has been made both brief and scientific. This handbook presents all the diseases usually encountered in the temperate latitudes, as well as many of those found in the tropics alone. The discussions on each disease are to the point, cover the important aspects of treatment and the means, both specific and nonspecific, of combating the disease.

The only principles that can endure over long periods are those that are founded in the greatest amount of basic integrity.—MANLY P. HALL.